Patent claims

1. Peptides of the AT_1 receptor, preferably comprising 5 to 30, preferably 5 to 10 amino acids as well as their variants, which can form an epitope and bind auto-antibodies occurring in preeclampsia and malign hypertension.

2. Peptides according to Claim 1, wherein they comprise SEQ ID no. 1 AFHYESQ or contain this sequence in an identical or slightly modified form.

3. Peptides according to Claim 1, wherein they are comprise at least one of the amino acid sequences AVHYQSN, SHFYQTR, GYYFDTN or ENTNIT or contain at least one of these sequences in an identical or slightly modified form.

4. Antibodies aimed against the epitope of the AT_1 receptor, wherein they recognise the peptides according to Claims 1 to 3.

5. Antibodies according to Claim 4, wherein they recognise the peptides of SEQ ID no. 1 or peptides with the amino acid sequence AVHYQSN, SHFYQTR, GYYFDTN or ENTNIT.

6. Use of the human AT_1 receptor, preferably of the peptides according to Claims 1 to 3, for the production of agents for diagnostic and therapeutic purposes in diseases with a positive antibody status, in particular preeclampsia.

7. Use according to Claim 6, wherein auto-antibody binding peptides according to Claims 1 to 3 are used.

8. Use according to Claims 6 and 7, wherein recombinantly produced, auto-antibody binding receptor parts of the AT_1 receptor as well as of the peptides according to Claims 1 to 3 are used.

9. Use according to Claims 6 to 8, wherein peptides according to Claims 1 to 3 and/or molecules containing these peptides are used soluble or bound to a

solid phase for direct or indirect (competitive) detection of antibodies in body fluids, in particular blood.

10. Use according to Claims 6 to 9, wherein peptides according to Claims 1 to 3 and/or molecules containing these peptides are used bound to a solid phase for binding and elimination of the pathological, functionally active auto-antibodies in body fluids, in particular blood, i.e. for immunoglobulin adsorption.

11. Use according to Claims 6 to 10, wherein the amino acid sequences and/or molecules containing these sequences are used bound to a solid phase for binding and elimination of the pathological, functionally active auto-antibodies in body fluids, in particular blood, i.e. for immunoglobulin adsorption in combination with unspecific (overall immunoglobulin binding ligands).

12. Binding and elimination of the pathological, functionally active auto-antibodies according to Claims 4 and 5 in body fluids, in particular blood, by use of inspecific adsorber molecules such as protein A, protein G, anti-human immunoglobulin as well as overall immunoglobulin binding ligands such as amino acids, in particular L-tryptophane or peptides.

13. Use of peptides at least containing at least one of the amino acid sequences according to Claims 1 to 3 for the immunisation of mammals for the purpose of obtaining polyclonal and monoclonal antibodies.

14. Use of antibodies aimed against the amino acid sequences according to Claims 1 to 3 for immunisation of mammals for the purpose of obtaining anti-idiotypical antibodies.

15. Antigenic agent for detection of preeclampsia and malign hypertension, wherein it contains at least one peptide according to Claims 1 to 3, preferably SEQ ID no. 1.

16. Immunogenic agent, wherein it contains at least one peptide according to Claims 1 to 3, preferably SEQ ID no. 1, which induces the production of

antibodies capable of recognising auto-antigens in preeclampsia or malign hypertension.

17. Test kit to determine anti-AT_1 receptor antibodies for proof of preeclampsia or malign hypertension, containing at least one peptide according to Claims 1 to 3.

18. Method to detect anti-AT_1 receptor antibodies in biological fluids, wherein the sample to be examined is brought into contact with at least one peptide of Claims 1 to 3 or with a combination of these peptides with a carrier material under conditions permitting an antigen-antibody reaction and rendering proof by means of physical or chemical methods known per se.

19. Use of the peptides according to Claims 1 to 3 for production of therapeutic agents against preeclampsia or malign hypertension.